

greater in an operating day and monitoring data are insufficient, as defined in paragraph (f)(1)(iv) of this section, to constitute a valid hour of data for at least 75 percent of the operating hours.

(iii) When the period of control or recovery device operation is less than 4 hours in an operating day and more than two of the hours during the period of operation do not constitute a valid hour of data due to insufficient monitoring data, as defined in paragraph (f)(1)(iv) of this section.

(iv) Monitoring data are insufficient to constitute a valid hour of data, as used in paragraphs (f)(1)(ii) and (f)(1)(iii) of this section, if measured values are unavailable for any of the 15-minute periods within the hour. For data compression systems approved under §63.1335(g)(3), monitoring data are insufficient to calculate a valid hour of data if there are less than four data measurements made during the hour.

(2) For batch process vents, an excursion means one of the two cases listed in paragraphs (f)(2)(i) and (f)(2)(ii) of this section. For a control device where multiple parameters are monitored, if one or more of the parameters meets the excursion criteria in either paragraph (f)(2)(i) or (f)(2)(ii) of this section, this is considered a single excursion for the control device.

(i) When the batch cycle daily average value of one or more monitored parameters is above the maximum or below the minimum established level for the given parameters.

(ii) When monitoring data are insufficient. Monitoring data shall be considered insufficient when measured values are not available for at least 75 percent of the 15-minute periods when batch emission episodes, or portions thereof, selected to be controlled are being vented to the control device during the operating day.

(g) *Excused excursions.* A number of excused excursions shall be allowed for each control or recovery device for each semiannual period. The number of excused excursions for each semiannual period is specified in paragraphs (g)(1) through (g)(6) of this section. This paragraph (g) applies to affected sources required to submit Periodic Reports semiannually or quarterly. The

first semiannual period is the 6-month period starting the date the Notification of Compliance Status is due.

(1) For the first semiannual period—six excused excursions.

(2) For the second semiannual period—five excused excursions.

(3) For the third semiannual period—four excused excursions.

(4) For the fourth semiannual period—three excused excursions.

(5) For the fifth semiannual period—two excused excursions.

(6) For the sixth and all subsequent semiannual periods—one excused excursion.

#### **§63.1335 General recordkeeping and reporting provisions.**

(a) *Data retention.* Each owner or operator of an affected source shall keep copies of all applicable records and reports required by this subpart for at least 5 years, unless otherwise specified in this subpart.

(b) *Requirements of subpart A of this part.* The owner or operator of an affected source shall comply with the applicable recordkeeping and reporting requirements in subpart A of this part as specified in Table 1 of this subpart. These requirements include, but are not limited to, the requirements specified in paragraphs (b)(1) and (b)(2) of this section.

(1) *Start-up, shutdown, and malfunction plan.* The owner or operator of an affected source shall develop and implement a written start-up, shutdown, and malfunction plan as specified in §63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the affected source during periods of start-up, shutdown, and malfunction and a program for corrective action for malfunctioning process and air pollution control equipment used to comply with this subpart. The affected source shall keep this plan onsite and shall incorporate it by reference into their operating permit. Records associated with the plan shall be kept as specified in paragraphs (b)(1)(i)(A) through (b)(1)(i)(D) of this section. Reports related to the plan shall be submitted as specified in paragraph (b)(1)(ii) of this section.

(i) *Records of start-up, shutdown, and malfunction.* The owner or operator

shall keep the records specified in paragraphs (b)(1)(i)(A) through (b)(1)(i)(D) of this section.

(A) Records of the occurrence and duration of each malfunction of air pollution control equipment or continuous monitoring systems used to comply with this subpart.

(B) For each start-up, shutdown, or malfunction, a statement that the procedures specified in the affected source's start-up, shutdown, and malfunction plan were followed; alternatively, documentation of any actions taken that are not consistent with the plan.

(C) For continuous monitoring systems used to comply with this subpart, records documenting the completion of calibration checks and maintenance of continuous monitoring systems that are specified in the manufacturer's instructions.

(D) Records specified in paragraphs (b)(1)(i)(B) and (b)(1)(i)(C) of this section are not required if they pertain solely to Group 2 emission points that are not included in an emissions average or to Group 2 continuous process vents subject to § 63.1315(a) with a total resource effectiveness value greater than 4.0 or, for Group 2 continuous process vents subject to § 63.1315(b), with a total resource effectiveness value greater than 6.7.

(i) *Reports of start-up, shutdown, and malfunction.* For the purposes of this subpart, the semiannual start-up, shutdown, and malfunction reports shall be submitted on the same schedule as the Periodic Reports required under paragraph (e)(6) of this section instead of the schedule specified in § 63.10(d)(5)(i). Said reports shall include the information specified in paragraphs (b)(1)(i)(A) through (b)(1)(i)(C) of this section and shall contain the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy.

(2) *Application for approval of construction or reconstruction.* For new affected sources, each owner or operator shall comply with the provisions in § 63.5 regarding construction and reconstruction, excluding the provisions specified in § 63.5 (d)(1)(ii)(H), (d)(2), and (d)(3)(ii).

(c) *Requirements of subpart H of this part.* Owners or operators of affected sources shall comply with the reporting and recordkeeping requirements in subpart H of this part, except as specified in § 63.1331.

(d) *Recordkeeping and documentation.* Owners or operators required to keep continuous records shall keep records as specified in paragraphs (d)(1) through (d)(8) of this section, unless an alternative recordkeeping system has been requested and approved as specified in paragraph (g) or (h) of this section. Documentation requirements are specified in paragraphs (d)(9) and (d)(10) of this section.

(1) The monitoring system shall measure data values at least once every 15 minutes.

(2) The owner or operator shall record either each measured data value or block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values. Owners or operators of batch process vents must record each measured data value.

(3) Daily average (or batch cycle daily average) values of each continuously monitored parameter shall be calculated for each operating day as specified in paragraphs (d)(3)(i) through (d)(3)(ii) of this section, except as specified in paragraph (d)(6) of this section.

(i) The daily average value or batch cycle daily average shall be calculated as the average of all parameter values recorded during the operating day. As specified in § 63.1326(e)(2)(i), only parameter values measured during those batch emission episodes, or portions thereof, in the batch cycle that the owner or operator has chosen to control shall be used to calculate the average. The calculated average shall cover a 24-hour period if operation is continuous, or the number of hours of operation per operating day if operation is not continuous.

(ii) The operating day shall be the period the owner or operator specifies in the operating permit or the Notification of Compliance Status. It may be

from midnight to midnight or another 24-hour period.

(4) *Records required when out of compliance.* If the daily average (or batch cycle daily average) value of a monitored parameter for a given operating day is below the minimum level or above the maximum level established in the Notification of Compliance Status or operating permit, the owner or operator shall retain the data recorded that operating day under paragraph (d)(2) of this section.

(5) *Records required when in compliance for daily average value or batch cycle daily average value.* If the daily average (or batch cycle daily average) value of a monitored parameter for a given operating day is above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the owner or operator shall either:

(i) Retain block average values for 1 hour or shorter periods for that operating day; or

(ii) Retain the data recorded in paragraph (d)(2) of this section.

(6) *Records required when all recorded values are in compliance.* If all recorded values for a monitored parameter during an operating day are above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the owner or operator may record that all values were above the minimum level or below the maximum level rather than calculating and recording a daily average (or batch cycle daily average) for that operating day. For these operating days, the records required in paragraph (d)(5) of this section shall also be retained for 5 years.

(7) Monitoring data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any average computed under this subpart. Records shall be kept of the times and durations of all such periods.

(8) In addition to the periods specified in paragraph (d)(7) of this section, records shall be kept of the times and durations of any other periods during process operation or control device operation when monitors are not operating. For batch process vents, this para-

graph (d)(8) only applies during batch emission episodes, or portions thereof, that the owner or operator has selected to control.

(9) For each TPPU that is not part of the affected source because it does not use as a reactant or process solvent, or produce as a by-product or co-product any organic HAP, the owner or operator shall maintain the documentation specified in § 63.1310(b)(1).

(10) For each flexible operation unit in which the primary product is determined to be something other than a thermoplastic product, the owner or operator shall maintain the documentation specified in § 63.1310(f)(6).

(e) *Reporting and notification.* (1) In addition to the reports and notifications required by subparts A and H of this part, as specified in this subpart, the owner or operator of an affected source shall prepare and submit the reports listed in paragraphs (e)(3) through (e)(8) of this section, as applicable.

(2) All reports required under this subpart shall be sent to the Administrator at the addresses listed in § 63.13. If acceptable to both the Administrator and the owner or operator of an affected source, reports may be submitted on electronic media.

(3) *Precompliance Report.* Affected sources requesting an extension for compliance, or requesting approval to use alternative monitoring parameters, alternative continuous monitoring and recordkeeping, or alternative controls, shall submit a Precompliance Report according to the schedule described in paragraph (e)(3)(i) of this section. The Precompliance Report shall contain the information specified in paragraphs (e)(3)(ii) through (e)(3)(vi) of this section, as appropriate.

(i) *Submittal dates.* The Precompliance Report shall be submitted to the Administrator no later than 12 months prior to the compliance date. For new affected sources, the Precompliance Report shall be submitted to the Administrator with the application for approval of construction or reconstruction required in paragraph (b)(2) of this section.

(ii) A request for an extension for compliance must be submitted in the Precompliance Report, if it has not

been submitted to the operating permit authority as part of the operating permit application. The request for a compliance extension will include the data outlined in § 63.6(i)(6)(i) (A), (B), and (D), as required in § 63.1311(e)(1).

(iii) The alternative monitoring parameter information required in paragraph (f) of this section shall be submitted if, for any emission point, the owner or operator of an affected source seeks to comply through the use of a control technique other than those for which monitoring parameters are specified in this subpart or in subpart G of this part or seeks to comply by monitoring a different parameter than those specified in this subpart or in subpart G of this part.

(iv) If the affected source seeks to comply using alternative continuous monitoring and recordkeeping as specified in paragraph (g) of this section, the information requested in paragraph (e)(3)(iv)(A) or (e)(3)(iv)(B) of this section must be submitted in the Precompliance Report.

(A) The owner or operator must submit notification of the intent to use the provisions specified in paragraph (g) of this section; or

(B) The owner or operator must submit a request for approval to use alternative continuous monitoring and recordkeeping provisions as specified in paragraph (g) of this section.

(v) The owner or operator shall report the intent to use alternative controls to comply with the provisions of this subpart. Alternative controls must be deemed by the Administrator to be equivalent to the controls required by the standard, under the procedures outlined in § 63.6(g).

(vi) If an owner or operator demonstrates that the emissions estimation equations contained in § 63.1323(b) are inappropriate as specified in § 63.1323(b)(6)(ii)(B), the information required by § 63.1323(b)(6)(ii)(D) shall be submitted.

(vii) If an owner or operator establishes parameter monitoring levels according to the procedures contained in § 63.1334 (c) or (d), the information specified by § 63.1334 (c) or (d), as appropriate.

(4) *Emissions Averaging Plan.* For all existing affected sources using emis-

sions averaging, an Emissions Averaging Plan shall be submitted for approval according to the schedule and procedures described in paragraph (e)(4)(i) of this section. The Emissions Averaging Plan shall contain the information specified in paragraph (e)(4)(ii) of this section, unless the information required in paragraph (e)(4)(ii) of this section is submitted with an operating permit application. An owner or operator of an affected source who submits an operating permit application instead of an Emissions Averaging Plan shall submit the information specified in paragraph (e)(8) of this section. In addition, a supplement to the Emissions Averaging Plan, as required under paragraph (e)(4)(iii) of this section, is to be submitted whenever alternative controls or operating scenarios may be used to comply with this subpart. Updates to the Emissions Averaging Plan shall be submitted in accordance with paragraph (e)(4)(iv) of this section.

(i) *Submittal and approval.* The Emissions Averaging Plan shall be submitted no later than 18 months prior to the compliance date, and it is subject to Administrator approval. The Administrator shall determine within 120 operating days whether the Emissions Averaging Plan submitted presents sufficient information. The Administrator shall either approve the Emissions Averaging Plan, request changes, or request that the owner or operator submit additional information. Once the Administrator receives sufficient information, the Administrator shall approve, disapprove, or request changes to the plan within 120 operating days.

(ii) *Information required.* The Emissions Averaging Plan shall contain the information listed in paragraphs (e)(4)(ii)(A) through (e)(4)(ii)(K) of this section for all emission points included in an emissions average.

(A) The required information shall include the identification of all emission points in the planned emissions average and, where applicable, notation of whether each storage vessel, continuous process vent, batch process vent, aggregate batch vent stream, and process wastewater stream is a Group 1 or Group 2 emission point, as defined in

§ 63.1312 or as designated under § 63.1332 (c)(3) through (c)(5).

(B) The required information shall include the projected emission debits and credits for each emission point and the sum for the emission points involved in the average calculated according to § 63.1332. The projected credits must be greater than or equal to the projected debits, as required under § 63.1332(e)(3).

(C) The required information shall include the specific control technology or pollution prevention measure that will be used for each emission point included in the average and date of application or expected date of application.

(D) The required information shall include the specific identification of each emission point affected by a pollution prevention measure. To be considered a pollution prevention measure, the criteria in § 63.1332(j)(1) must be met. If the same pollution prevention measure reduces or eliminates emissions from multiple emission points in the average, the owner or operator must identify each of these emission points.

(E) The required information shall include a statement that the compliance demonstration, monitoring, inspection, recordkeeping, and reporting provisions in § 63.1332 (m), (n), and (o) that are applicable to each emission point in the emissions average will be implemented beginning on or before the date of compliance.

(F) The required information shall include documentation of the data listed in paragraphs (e)(4)(ii)(F)(1) through (e)(4)(ii)(F)(5) of this section for each storage vessel and continuous process vent subject to § 63.1315 included in the average.

(1) The required documentation shall include the values of the parameters used to determine whether the emission point is Group 1 or Group 2. Where TRE index value is used for continuous process vent group determination, the estimated or measured values of the parameters used in the TRE equation in § 63.115(d) and the resulting TRE index value shall be submitted.

(2) The required documentation shall include the estimated values of all parameters needed for input to the emission debit and credit calculations in

§ 63.1332 (g) and (h). These parameter values shall be specified in the affected source's Emissions Averaging Plan (or operating permit) as enforceable operating conditions. Changes to these parameters must be reported as required by paragraph (e)(4)(iv) of this section.

(3) The required documentation shall include the estimated percent reduction if a control technology achieving a lower percent reduction than the efficiency of the applicable reference control technology or standard is or will be applied to the emission point.

(4) The required documentation shall include the anticipated nominal efficiency if a control technology achieving a greater percent emission reduction than the efficiency of the reference control technology is or will be applied to the emission point. The procedures in § 63.1332(i) shall be followed to apply for a nominal efficiency.

(5) The required documentation shall include the operating plan required by § 63.1314, as specified in § 63.122 (a)(2) and (b) for each storage vessel controlled with a closed-vent system with a control device other than a flare.

(G) The information specified in paragraph (f) of this section shall be included in the Emissions Averaging Plan for:

(1) Each continuous process vent subject to § 63.1315 controlled by a pollution prevention measure or control technique for which monitoring parameters or inspection procedures are not specified in § 63.114; and

(2) Each storage vessel controlled by pollution prevention or a control technique other than an internal or external floating roof or a closed vent system with a control device.

(H) The required information shall include documentation of the data listed in paragraphs (e)(4)(ii)(H)(1) through (e)(4)(ii)(H)(5) of this section for each collection of continuous process vents located in a process section within the affected source subject to § 63.1316 (b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) included in the average.

(1) For continuous process vents subject to § 63.1316(b)(1)(i), the required documentation shall include the values of the parameters used to determine whether the emission point is Group 1 or Group 2. Continuous process vents

subject to § 63.1316 (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) are considered Group 1 emission points for purposes of emissions averaging, as specified in § 63.1332(c)(5).

(2) The required documentation shall include the estimated values of all parameters needed for input to the emission debit and credit calculations in § 63.1332 (g) and (h). These parameter values shall be specified in the affected source's Emissions Averaging Plan (or operating permit) as enforceable operating conditions. Changes to these parameters must be reported as required by paragraph (e)(4)(iv) of this section.

(3) For process sections generating debits or credits by comparing actual emissions expressed as kg HAP emissions per Mg of product to the applicable standard, the required documentation shall include the actual emission level expressed as kg HAP emissions per Mg of product.

(4) For process sections using combustion control devices, the required documentation shall include the estimated percent reduction if a control technology achieving a lower percent reduction than the efficiency of the applicable reference control technology or standard is or will be applied to the emission point.

(5) For process sections using combustion control devices, the required documentation shall include the anticipated nominal efficiency if a control technology achieving a greater percent emission reduction than the efficiency of the reference control technology is or will be applied to the emission point. The procedures in § 63.1332(i) shall be followed to apply for a nominal efficiency.

(I) For each pollution prevention measure or control device used to reduce air emissions of organic HAP from each collection of continuous process vents located in a process section within the affected source subject to § 63.1316 (b)(1)(i), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), or (c)(1) and for which no monitoring parameters or inspection procedures are specified in § 63.114, the information specified in paragraph (f) of this section, Alternative Monitoring Parameters, shall be included in the Emissions Averaging Plan.

(J) The required information shall include documentation of the data listed in paragraphs (e)(4)(ii)(J)(1) through (e)(4)(ii)(J)(3) of this section for each batch process vent and aggregate batch vent stream included in the average.

(1) The required documentation shall include the values of the parameters used to determine whether the emission point is Group 1 or Group 2.

(2) The required documentation shall include the estimated values of all parameters needed for input to the emission debit and credit calculations in § 63.1332 (g) and (h). These parameter values shall be specified in the affected source's Emissions Averaging Plan (or operating permit) as enforceable operating conditions. Changes to these parameters must be reported as required by paragraph (e)(4)(iv) of this section.

(3) For batch process vents, the required documentation shall include the estimated percent reduction for the batch cycle. For aggregate batch vent streams, the required documentation shall include the estimated percent reduction achieved on a continuous basis.

(K) For each pollution prevention measure or control device used to reduce air emissions of organic HAP from batch process vents or aggregate batch vent streams and for which no monitoring parameters or inspection procedures are specified in § 63.1324, the information specified in paragraph (f) of this section, Alternative Monitoring Parameters, shall be included in the Emissions Averaging Plan.

(L) The required information shall include documentation of the data listed in paragraphs (e)(4)(ii)(L)(1) through (e)(4)(ii)(L)(4) of this section for each process wastewater stream included in the average.

(1) The required documentation shall include the data used to determine whether the wastewater stream is a Group 1 or Group 2 wastewater stream and the information specified in Table 14b of subpart G of this part for wastewater streams at new and existing affected sources.

(2) The required documentation shall include the estimated values of all parameters needed for input to the wastewater emission credit and debit calculations in § 63.1332 (g) and (h). These parameter values shall be specified in

the affected source's Emissions Averaging Plan (or operating permit) as enforceable operating conditions. Changes to these parameters must be reported as required by paragraph (e)(4)(iv) of this section.

(3) The required documentation shall include the estimated percent reduction if:

(i) A control technology that achieves an emission reduction less than or equal to the emission reduction that would otherwise have been achieved by a steam stripper designed to the specifications found in §63.138(g) is or will be applied to the wastewater stream;

(ii) A control technology achieving less than or equal to 95 percent emission reduction is or will be applied to the vapor stream(s) vented and collected from the treatment processes; or

(iii) A pollution prevention measure is or will be applied.

(4) The required documentation shall include the anticipated nominal efficiency if the owner or operator plans to apply for a nominal efficiency under §63.1332(i). A nominal efficiency shall be applied for if:

(i) A control technology that achieves an emission reduction greater than the emission reduction that would have been achieved by a steam stripper designed to the specifications found in §63.138(g), is or will be applied to the wastewater stream; or

(ii) A control technology achieving greater than 95 percent emission reduction is or will be applied to the vapor stream(s) vented and collected from the treatment processes.

(M) For each pollution prevention measure, treatment process, or control device used to reduce air emissions of organic HAP from wastewater and for which no monitoring parameters or inspection procedures are specified in §63.143, the information specified in paragraph (f) of this section, Alternative Monitoring Parameters, shall be included in the Emissions Averaging Plan.

(N) The required information shall include documentation of the data required by §63.1332(k). The documentation must demonstrate that the emissions from the emission points proposed to be included in the average will

not result in greater hazard or, at the option of the Administrator, greater risk to human health or the environment than if the emission points were not included in an emissions average.

(iii) *Supplement to Emissions Averaging Plan.* The owner or operator required to prepare an Emissions Averaging Plan under paragraph (e)(4) of this section shall also prepare a supplement to the Emissions Averaging Plan for any alternative controls or operating scenarios that may be used to achieve compliance.

(iv) *Updates to Emissions Averaging Plan.* The owner or operator of an affected source required to submit an Emissions Averaging Plan under paragraph (e)(4) of this section shall also submit written updates of the Emissions Averaging Plan to the Administrator for approval under the circumstances described in paragraphs (e)(4)(iv)(A) and (e)(4)(iv)(B) of this section unless the relevant information has been included and submitted in an operating permit application or amendment.

(A) The owner or operator who plans to make a change listed in either paragraph (e)(4)(iv)(A)(1) or (e)(4)(iv)(A)(2) of this section shall submit an Emissions Averaging Plan update at least 120 operating days prior to making the change.

(1) An Emissions Averaging Plan update shall be submitted whenever an owner or operator elects to achieve compliance with the emissions averaging provisions in §63.1332 by using a control technique other than that specified in the Emissions Averaging Plan or plans to monitor a different parameter or operate a control device in a manner other than that specified in the Emissions Averaging Plan.

(2) An Emissions Averaging Plan update shall be submitted whenever an emission point or a TPPU is added to an existing affected source and is planned to be included in an emissions average, or whenever an emission point not included in the emissions average described in the Emissions Averaging Plan is to be added to an emissions average. The information in paragraph (e)(4) of this section shall be updated to include the additional emission point.

(B) The owner or operator who has made a change as defined in paragraph (e)(4)(iv)(B)(1) or (e)(4)(iv)(B)(2) of this section shall submit an Emissions Averaging Plan update within 90 operating days after the information regarding the change is known to the affected source. The update may be submitted in the next quarterly periodic report if the change is made after the date the Notification of Compliance Status is due.

(1) An Emissions Averaging Plan update shall be submitted whenever a process change is made such that the group status of any emission point in an emissions average changes.

(2) An Emissions Averaging Plan update shall be submitted whenever a value of a parameter in the emission credit or debit equations in § 63.1332 (g) or (h) changes such that it is below the minimum or above the maximum established level specified in the Emissions Averaging Plan and causes a decrease in the projected credits or an increase in the projected debits.

(C) The Administrator shall approve or request changes to the Emissions Averaging Plan update within 120 operating days of receipt of sufficient information regarding the change for emission points included in emissions averages.

(5) *Notification of Compliance Status.* For existing and new affected sources, a Notification of Compliance Status shall be submitted within 150 operating days after the compliance dates specified in § 63.1311. The notification shall contain the information listed in paragraphs (e)(5)(i) through (e)(5)(viii) of this section.

(i) The results of any emission point group determinations, process section applicability determinations, performance tests, inspections, continuous monitoring system performance evaluations, any other information used to demonstrate compliance, and any other information required to be included in the Notification of Compliance Status under § 63.122 for storage vessels, § 63.117 for continuous process vents, § 63.146 for process wastewater, § 63.1316 through § 63.1320 for continuous process vents subject to § 63.1316, § 63.1327 for batch process vents, § 63.1329 for process contact cooling towers, and § 63.1332 for

emission points included in an emissions average. In addition, each owner or operator shall comply with paragraph (e)(5)(i)(A) and (e)(5)(i)(B) of this section.

(A) For performance tests, group determinations, and process section applicability determinations that are based on measurements, the Notification of Compliance Status shall include one complete test report, as described in paragraph (e)(5)(i)(B) of this section, for each test method used for a particular kind of emission point. For additional tests performed for the same kind of emission point using the same method, the results and any other required information shall be submitted, but a complete test report is not required.

(B) A complete test report shall include a brief process description, sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information required by the test method.

(ii) For each monitored parameter for which a maximum or minimum level is required to be established under § 63.120(d)(3) for storage vessels, § 63.114(e) for continuous process vents, § 63.1324 for batch process vents and aggregate batch vent streams, § 63.143(f) for process wastewater, § 63.1332(m) for emission points in emissions averages, paragraph (e)(8) or (f) of this section, the Notification of Compliance Status shall contain the information specified in paragraphs (e)(5)(ii)(A) through (e)(5)(ii)(D) of this section, unless this information has been established and provided in the operating permit.

(A) The required information shall include the specific maximum or minimum level of the monitored parameter(s) for each emission point.

(B) The required information shall include the rationale for the specific maximum or minimum level for each parameter for each emission point, including any data and calculations used



to develop the level and a description of why the level indicates proper operation of the control device.

(C) The required information shall include a definition of the affected source's operating day, as specified in paragraph (d)(3)(ii) of this section, for purposes of determining daily average values or batch cycle daily average values of monitored parameters.

(D) For batch process vents, the required information shall include a definition of each batch cycle that requires the control of one or more batch emission episodes during the cycle, as specified in § 63.1325(c)(2) and § 63.1334(b)(3)(iii).

(iii) For emission points included in an emissions average, the Notification of Compliance Status shall contain the values of all parameters needed for input to the emission credit and debit equations in § 63.1332 (g) and (h), calculated or measured according to the procedures in § 63.1332 (g) and (h), and the resulting calculation of credits and debits for the first quarter of the year. The first quarter begins on the compliance date specified.

(iv) The determination of applicability for flexible operation units as specified in § 63.1310(f)(6).

(v) The parameter monitoring levels for flexible operation units, and the basis on which these levels were selected, or a demonstration that these levels are appropriate at all times, as specified in § 63.1310(f)(7).

(vi) The results for each predominant use determination for storage vessels belonging to an affected source subject to this subpart that is made under § 63.1310(g)(6).

(vii) The results for each predominant use determination for recovery operation equipment belonging to an affected source subject to this subpart that is made under § 63.1310(h)(6).

(viii) For owners or operators of Group 2 batch process vents establishing a batch cycle limitation as specified in § 63.1325(g), the affected source's operating year for purposes of determining compliance with the batch cycle limitation.

(6) *Periodic Reports.* For existing and new affected sources, each owner or operator shall submit Periodic Reports as

specified in paragraphs (e)(6)(i) through (e)(6)(xi) of this section.

(i) Except as specified in paragraphs (e)(6)(x) and (e)(6)(xi) of this section, a report containing the information in paragraph (e)(6)(ii) of this section or containing the information in paragraphs (e)(6)(iii) through (e)(6)(ix) of this section, as appropriate, shall be submitted semiannually no later than 60 operating days after the end of each 180 day period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. Subsequent reports shall cover each preceding 6-month period.

(ii) If none of the compliance exceptions specified in paragraphs (e)(6)(iii) through (e)(6)(ix) of this section occurred during the 6-month period, the Periodic Report required by paragraph (e)(6)(i) of this section shall be a statement that the affected source was in compliance for the preceding 6-month period and no activities specified in paragraphs (e)(6)(iii) through (e)(6)(ix) of this section occurred during the preceding 6-month period.

(iii) For an owner or operator of an affected source complying with the provisions of §§ 63.1314 through 63.1330 for any emission point or process section, Periodic Reports shall include:

(A) All information specified in § 63.122 for storage vessels; §§ 63.117 and 63.118 and § 63.1320 for continuous process vents, as applicable; § 63.1327 for batch process vents and aggregate batch vent streams; § 63.104 for heat exchange systems; and § 63.146 for process wastewater;

(B) The daily average values or batch cycle daily average values of monitored parameters for both excused excursions, as defined in § 63.1334(g), and unexcused excursions, as defined in § 63.1334(f). For excursions caused by lack of monitoring data, the duration of periods when monitoring data were not collected shall be specified;

(C) The periods when monitoring data were not collected shall be specified;

(D) The information in paragraphs (e)(6)(iii)(D)(i) through (e)(6)(iii)(D)(3) of this section, as applicable;

(1) Any supplements to the Emissions Averaging Plan, as required in paragraph (e)(4)(iii) of this section;

(2) Notification if a process change is made such that the group status of any emission point changes. The information submitted shall include a compliance schedule, as specified in paragraphs (e)(6)(iii)(D)(2)(i) and (e)(6)(iii)(D)(2)(ii) of this section, for emission points that are added or that change from Group 2 to Group 1 as specified in § 63.1310(i)(2)(ii); for continuous process vents under the conditions listed in § 63.1315(a)(12) or § 63.1320(b)(3), as applicable; or for batch process vents under the conditions listed in § 63.1327(b) or § 63.1327(d). This information may be submitted in a separate report, as specified in § 63.1315(a)(12), § 63.1320(b)(3), § 63.1327(b), or § 63.1327(d); and

(i) The owner or operator shall submit to the Administrator for approval a compliance schedule and a justification for the schedule.

(ii) The Administrator shall approve the compliance schedule or request changes within 120 operating days of receipt of the compliance schedule and justification.

(3) Notification if one or more emission point(s) or one or more TPPU is added to an affected source. The owner or operator shall submit the information contained in paragraphs (e)(6)(iii)(D)(3)(i) through (e)(6)(iii)(D)(3)(iii) of this section:

(i) A description of the addition to the affected source;

(ii) Notification of the group status of the additional emission point or all emission points in the TPPU; and

(iii) A compliance schedule, as required under paragraph (e)(6)(iii)(D)(2) of this section.

(E) The information in paragraph (b)(1)(ii) of this section for reports of start-up, shutdown, and malfunction.

(iv) For each batch process vent with a batch cycle limitation, every second Periodic Report shall include the type and number of batch cycles accomplished during the preceding 12-month period and a statement that the batch process vent is either in or out of compliance with the batch cycle limitation.

(v) If any performance tests are reported in a Periodic Report, the following information shall be included:

(A) One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in paragraph (e)(5)(i)(B) of this section.

(B) For additional tests performed for the same kind of emission point using the same method, results and any other information required shall be submitted, but a complete test report is not required.

(vi) The Periodic Report shall include the results for each change made to a primary product determination for a thermoplastic product made under § 63.1310(f)(6).

(vii) The Periodic Report shall include the results for each change made to a predominant use determination for a storage vessel belonging to an affected source subject to this subpart that is made under § 63.1310(g)(6).

(viii) The Periodic Report shall include the results for each change made to a predominant use determination for recovery operation equipment belonging to an affected source subject to this subpart that is made under § 63.1310(h)(6).

(ix) The Periodic Report required by § 63.1331(a)(5) may be submitted as part of the Periodic Report required by paragraph (e)(6) of this section.

(x) The owner or operator of an affected source shall submit quarterly reports for all emission points included in an emissions average.

(A) The quarterly reports shall be submitted no later than 60 operating days after the end of each quarter. The first report shall be submitted with the Notification of Compliance Status no later than 150 days after the compliance date.

(B) The quarterly reports shall include the information specified in paragraphs (e)(6)(x)(B)(1) through (e)(6)(x)(B)(7) of this section for all emission points included in an emissions average.

(1) The credits and debits calculated each month during the quarter;

(2) A demonstration that debits calculated for the quarter are not more than 1.30 times the credits calculated

for the quarter, as required under § 63.1332(e)(4);

(3) The values of any inputs to the debit and credit equations in § 63.1332(g) and (h) that change from month to month during the quarter or that have changed since the previous quarter;

(4) Results of any performance tests conducted during the reporting period including one complete report for each test method used for a particular kind of emission point as described in paragraph (e)(6)(v) of this section;

(5) Reports of daily average (or batch cycle daily average) values of monitored parameters for excursions as defined in § 63.1334(f);

(6) For excursions caused by lack of monitoring data, the duration of periods when monitoring data were not collected shall be specified; and

(7) Any other information the affected source is required to report under the operating permit or Emissions Averaging Plan for the affected source.

(C) § 63.1334 shall govern the use of monitoring data to determine compliance for Group 1 and Group 2 emission points included in emissions averages.

(D) Every fourth quarterly report shall include the following:

(1) A demonstration that annual credits are greater than or equal to annual debits as required by § 63.1332(e)(3); and

(2) A certification of compliance with all the emissions averaging provisions in § 63.1332.

(xi) The owner or operator of an affected source shall submit quarterly reports for particular emission points and process sections not included in an emissions average as specified in paragraphs (e)(6)(xi)(A) through (e)(6)(xi)(E) of this section.

(A) If requested by the Administrator, the owner or operator of an affected source shall submit quarterly reports for a period of 1 year for an emission point or process section that is not included in an emissions average if either condition in paragraph (e)(6)(xi)(A)(1) or (e)(6)(xi)(A)(2) of this section is met.

(1) An emission point has any excursions, as defined in § 63.1334(f), for a semiannual reporting period.

(2) A process section subject to § 63.1316 is out of compliance with its applicable standard.

(B) The quarterly reports shall include all information specified in paragraphs (e)(6)(iii) through (e)(6)(ix) of this section applicable to the emission point or process section for which quarterly reporting is required under paragraph (e)(6)(xi)(A) of this section. Information applicable to other emission points within the affected source shall be submitted in the semiannual reports required under paragraph (e)(6)(i) of this section.

(C) Quarterly reports shall be submitted no later than 60 operating days after the end of each quarter.

(D) After quarterly reports have been submitted for an emission point for 1 year, the owner or operator may return to semiannual reporting for the emission point or process section unless the Administrator requests the owner or operator to continue to submit quarterly reports.

(E) § 63.1334 shall govern the use of monitoring data to determine compliance for Group 1 emission points.

(7) *Other reports.* Other reports shall be submitted as specified in paragraphs (e)(7)(i) through (e)(7)(ii) of this section.

(i) For storage vessels, the notifications of inspections required by § 63.1314 shall be submitted as specified in § 63.122 (h)(1) and (h)(2).

(ii) For owners or operators of affected sources required to request approval for a nominal control efficiency for use in calculating credits for an emissions average, the information specified in § 63.1332(i) shall be submitted.

(8) *Operating permit.* An owner or operator who submits an operating permit application instead of an Emissions Averaging Plan or a Precompliance Report shall submit the following information with the operating permit application:

(i) The information specified in paragraph (e)(4) of this section for points included in an emissions average;

(ii) The information specified in paragraph (e)(5) of this section, Notification of Compliance Status, as applicable; and

(iii) The information specified in paragraph (e)(3) of this section, Precompliance Report, as applicable.

(f) *Alternative monitoring parameters.* The owner or operator who has been directed by any section of this subpart to set unique monitoring parameters, or who requests approval to monitor a different parameter than those specified in § 63.1314 for storage vessels, § 63.1315 or 63.1317, as appropriate, for continuous process vents, § 63.1321 for batch process vents and aggregate batch vent streams, or § 63.1330 for wastewater shall submit the information specified in paragraphs (f)(1) through (f)(3) of this section in the Precompliance Report, as required by paragraph (e)(3) of this section. The owner or operator shall retain for a period of 5 years each record required by paragraphs (f)(1) through (f)(3) of this section.

(1) The required information shall include a description of the parameter(s) to be monitored to ensure the recovery device, control device, or pollution prevention measure is operated in conformance with its design and achieves the specified emission limit, percent reduction, or nominal efficiency, and an explanation of the criteria used to select the parameter(s).

(2) The required information shall include a description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation, the schedule for this demonstration, and a statement that the owner or operator will establish a level for the monitored parameter as part of the Notification of Compliance Status report required in paragraph (e)(5) of this section, unless this information has already been included in the operating permit application.

(3) The required information shall include a description of the proposed monitoring, recordkeeping, and reporting system, to include the frequency and content of monitoring, recordkeeping, and reporting. Further, the rationale for the proposed monitoring, recordkeeping, and reporting system shall be included if either condition in paragraph (f)(3)(i) or (f)(3)(ii) of this section is met:

(i) If monitoring and recordkeeping is not continuous; or

(ii) If reports of daily average values will not be included in Periodic Reports when the monitored parameter value is above the maximum level or below the minimum level as established in the operating permit or the Notification of Compliance Status.

(g) *Alternative continuous monitoring and recordkeeping.* An owner or operator choosing not to implement the provisions listed in § 63.1315 or 63.1317, as appropriate, for continuous process vents, § 63.1321 for batch process vents and aggregate batch vent streams, § 63.1314 for storage vessels, or § 63.1330 for wastewater, may instead request approval to use alternative continuous monitoring and recordkeeping provisions according to the procedures specified in paragraphs (g)(1) through (g)(4) of this section. Requests shall be submitted in the Precompliance Report as specified in paragraph (e)(3) of this section, if not already included in the operating permit application, and shall contain the information specified in paragraphs (g)(2)(ii) and (g)(3)(ii) of this section, as applicable.

(1) The provisions in § 63.8(f)(5)(i) shall govern the review and approval of requests.

(2) An owner or operator of an affected source that does not have an automated monitoring and recording system capable of measuring parameter values at least once every 15 minutes and that does not generate continuous records may request approval to use a nonautomated system with less frequent monitoring, in accordance with paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(i) The requested system shall include manual reading and recording of the value of the relevant operating parameter no less frequently than once per hour. Daily average (or batch cycle daily average) values shall be calculated from these hourly values and recorded.

(ii) The request shall contain:

(A) A description of the planned monitoring and recordkeeping system;

(B) Documentation that the affected source does not have an automated monitoring and recording system;

(C) Justification for requesting an alternative monitoring and recordkeeping system; and

(D) Demonstration to the Administrator's satisfaction that the proposed monitoring frequency is sufficient to represent control or recovery device operating conditions, considering typical variability of the specific process and control or recovery device operating parameter being monitored.

(3) An owner or operator may request approval to use an automated data compression recording system that does not record monitored operating parameter values at a set frequency (for example, once every 15 minutes) but records all values that meet set criteria for variation from previously recorded values, in accordance with paragraphs (g)(3)(i) and (g)(3)(ii) of this section.

(i) The requested system shall be designed to:

(A) Measure the operating parameter value at least once every 15 minutes;

(B) Except for the monitoring of batch process vents, calculate hourly average values each hour during periods of operation;

(C) Record the date and time when monitors are turned off or on;

(D) Recognize unchanging data that may indicate the monitor is not functioning properly, alert the operator, and record the incident;

(E) Calculate daily average (or batch cycle daily average) values of the monitored operating parameter based on all measured data; and

(F) If the daily average is not an excursion, as defined in §63.1334(f), the data for that operating day may be converted to hourly average values and the four or more individual records for each hour in the operating day may be discarded.

(ii) The request shall contain:

(A) A description of the monitoring system and data compression recording system, including the criteria used to determine which monitored values are recorded and retained;

(B) The method for calculating daily averages and batch cycle daily averages; and

(C) A demonstration that the system meets all criteria in paragraph (g)(3)(i) of this section.

(4) An owner or operator may request approval to use other alternative mon-

itoring systems according to the procedures specified in §63.8(f).

(h) *Reduced recordkeeping program.* For any parameter with respect to any item of equipment, the owner or operator may implement the recordkeeping requirements specified in paragraph (h)(1) or (h)(2) of this section as alternatives to the provisions specified in §63.1314 for storage vessels, §63.1315 or 63.1317, as appropriate, for continuous process vents, §63.1321 for batch process vents and aggregate batch vent streams, or §63.1330 for wastewater. The owner or operator shall retain for a period of 5 years each record required by paragraph (h)(1) or (h)(2) of this section.

(1) The owner or operator may retain only the daily average (or batch cycle daily average) value, and is not required to retain more frequent monitored operating parameter values, for a monitored parameter with respect to an item of equipment, if the requirements of paragraphs (h)(1)(i) through (h)(1)(vi) of this section are met. An owner or operator electing to comply with the requirements of paragraph (h)(1) of this section shall notify the Administrator in the Notification of Compliance Status or, if the Notification of Compliance Status has already been submitted, in the Periodic Report immediately preceding implementation of the requirements of paragraph (h)(1) of this section.

(i) The monitoring system is capable of detecting unrealistic or impossible data during periods of operation other than start-ups, shutdowns, or malfunctions (e.g., a temperature reading of  $-200^{\circ}\text{C}$  on a boiler), and will alert the operator by alarm or other means. The owner or operator shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(ii) The monitoring system generates, updated at least hourly throughout each operating day, a running average of the monitoring values that have been obtained during that operating day, and the capability to observe this running average is readily available to the Administrator on-site during the operating day. The owner or operator shall record the occurrence of any period meeting the criteria in

paragraphs (h)(1)(ii)(A) through (h)(1)(ii)(C) of this section. All instances in an operating day constitute a single occurrence.

(A) The running average is above the maximum or below the minimum established limits;

(B) The running average is based on at least six 1-hour periods; and

(C) The running average reflects a period of operation other than a start-up, shutdown, or malfunction.

(iii) The monitoring system is capable of detecting unchanging data during periods of operation other than start-ups, shutdowns, or malfunctions, except in circumstances where the presence of unchanging data is the expected operating condition based on past experience (e.g., pH in some scrubbers), and will alert the operator by alarm or other means. The owner or operator shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(iv) The monitoring system will alert the owner or operator by an alarm, if the running average parameter value calculated under paragraph (h)(1)(ii) of this section reaches a set point that is appropriately related to the established limit for the parameter that is being monitored.

(v) The owner or operator shall verify the proper functioning of the monitoring system, including its ability to comply with the requirements of paragraph (h)(1) of this section, at the times specified in paragraphs (h)(1)(v)(A) through (h)(1)(v)(C). The owner or operator shall document that the required verifications occurred.

(A) Upon initial installation.

(B) Annually after initial installation.

(C) After any change to the programming or equipment constituting the monitoring system, which might reasonably be expected to alter the monitoring system's ability to comply with the requirements of this section.

(vi) The owner or operator shall retain the records identified in paragraphs (h)(1)(vi)(A) through (h)(1)(vi)(C) of this section.

(A) Identification of each parameter, for each item of equipment, for which the owner or operator has elected to

comply with the requirements of paragraph (h) of this section.

(B) A description of the applicable monitoring system(s), and of how compliance will be achieved with each requirement of paragraphs (h)(1)(i) through (h)(1)(v) of this section. The description shall identify the location and format (e.g., on-line storage, log entries) for each required record. If the description changes, the owner or operator shall retain both the current and the most recent superseded description.

(C) A description, and the date, of any change to the monitoring system that would reasonably be expected to affect its ability to comply with the requirements of paragraph (h)(1) of this section.

(2) If an owner or operator has elected to implement the requirements of paragraph (h)(1) of this section for a monitored parameter with respect to an item of equipment and a period of 6 consecutive months has passed without an excursion as defined in paragraph (h)(2)(iv) of this section, the owner or operator is no longer required to record the daily average (or batch cycle daily average) value for any operating day when the daily average (or batch cycle daily average) value is less than the maximum or greater than the minimum established limit. With approval by the Administrator, monitoring data generated prior to the compliance date of this subpart shall be credited toward the period of 6 consecutive months, if the parameter limit and the monitoring accomplished during the period prior to the compliance date was required and/or approved by the Administrator.

(i) If the owner or operator elects not to retain the daily average (or batch cycle daily average) values, the owner or operator shall notify the Administrator in the next Periodic Report. The notification shall identify the parameter and unit of equipment.

(ii) If, on any operating day after the owner or operator has ceased recording daily average (or batch cycle daily average) values as provided in paragraph (h)(2) of this section, there is an excursion as defined in paragraph (h)(2)(iv) of this section, the owner or operator shall immediately resume retaining the daily average (or batch cycle daily

average) value for each operating day and shall notify the Administrator in the next Periodic Report. The owner or operator shall continue to retain each daily average (or batch cycle daily average) value until another period of 6 consecutive months has passed without an excursion as defined in paragraph (h)(2)(iv) of this section.

(iii) The owner or operator shall retain the records specified in paragraphs (h)(1)(i), (h)(1)(ii), and (h)(1)(vi) of this section, for the duration specified in paragraph (h) of this section. For any calendar week, if compliance with paragraphs (h)(1)(i) through (h)(1)(iv) of this section does not result in retention of a record of at least one occurrence or measured parameter value, the owner or operator shall record and retain at least one parameter value during a period of operation other than a start-up, shutdown, or malfunction.

(iv) For purposes of paragraph (h) of this section, an excursion means that the daily average (or batch cycle daily average) value of monitoring data for a parameter is greater than the maximum, or less than the minimum established value, except as provided in paragraphs (h)(2)(iv)(A) and (h)(2)(iv)(B) of this section.

(A) The daily average (or batch cycle daily average) value during any start-up, shutdown, or malfunction shall not be considered an excursion for purposes of paragraph (h)(2) of this section, if the owner or operator follows the applicable provisions of the start-up, shutdown, and malfunction plan required by §63.6(e)(3).

(B) An excused excursion, as described in §63.1334(g), shall not be considered an excursion for purposes of paragraph (h)(2) of this section.

## TABLES TO SUBPT. JJJ OF PART 63

TABLE 1.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART JJJ AFFECTED SOURCES

Reference	Applies to subpart JJJ	Comment
63.1(a)(1) .....	Yes .....	§63.1312 specifies definitions in addition to or that supersede definitions in §63.2.
63.1(a)(2)–63.1(a)(3) .....	Yes.	
63.1(a)(4) .....	Yes .....	Subpart JJJ (this table) specifies the applicability of each paragraph in subpart A to subpart JJJ.
63.1(a)(5) .....	No .....	Reserved.
63.1(a)(6)–63.1(a)(8) .....	Yes.	
63.1(a)(9) .....	No .....	Reserved.
63.1(a)(10) .....	No .....	Subpart JJJ and other cross-referenced subparts specify calendar or operating day.
63.1(a)(11) .....	Yes.	
63.1(a)(12)–63.1(a)(14) .....	Yes.	
63.1(b)(1) .....	Yes .....	Subpart JJJ (this table) specifies the applicability of each paragraph in subpart A to subpart JJJ.
63.1(b)(2) .....	Yes.	
63.1(b)(3) .....	No .....	§63.1310(b) provides documentation requirements for TPPUs not considered affected sources.
63.1(c)(1) .....	Yes .....	Subpart JJJ (this table) specifies the applicability of each paragraph in subpart A to subpart JJJ.
63.1(c)(2) .....	No .....	Area sources are not subject to subpart JJJ.
63.1(c)(3) .....	No .....	Reserved.
63.1(c)(4) .....	Yes.	
63.1(c)(5) .....	Yes .....	Except that affected sources are not required to submit notifications overridden by this table.
63.1(d) .....	No .....	Reserved.
63.1(e) .....	Yes.	
63.2 .....	Yes .....	§63.1312 specifies those subpart A definitions that apply to subpart JJJ.
63.3 .....	Yes .....	Subpart JJJ specifies those units of measure that apply to subpart JJJ.
63.4(a)(1)–63.4(a)(3) .....	Yes.	
63.4(a)(4) .....	No .....	Reserved.
63.4(a)(5) .....	Yes.	
63.4(b) .....	Yes.	
63.4(c) .....	Yes.	

## Environmental Protection Agency

## Pt. 63, Subpt. JJJ, Table 1

TABLE 1.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART JJJ AFFECTED SOURCES—  
Continued

Reference	Applies to subpart JJJ	Comment
63.5(a) .....	Yes.	
63.5(b)(1) .....	Yes.	
63.5(b)(2) .....	No .....	Reserved.
63.5(b)(3) .....	Yes.	
63.5(b)(4) .....	No .....	Area sources are not subject to subpart JJJ.
63.5(b)(5) .....	Yes.	
63.5(b)(6) .....	No .....	§ 63.1310(i) specifies requirements.
63.5(c) .....	No .....	Reserved.
63.5(d)(1)(i) .....	No.	
63.5(d)(1)(ii) .....	Yes .....	Except that for affected sources subject to subpart JJJ, emission estimates specified in § 63.5(d)(1)(ii)(H) are not required.
63.5(d)(1)(iii) .....	Yes .....	Except that § 63.1335(e)(5) specifies Notification of Compliance Status requirements.
63.5(d)(2) .....	No.	
63.5(d)(3) .....	Yes .....	Except § 63.5(d)(3)(ii) does not apply.
63.5(d)(4) .....	Yes.	
63.5(e) .....	Yes.	
63.5(f)(1) .....	Yes.	
63.5(f)(2) .....	Yes .....	Except that where § 63.5(d)(1) is referred to, § 63.5(d)(1)(i) does not apply.
63.6(a) .....	Yes.	
63.6(b)(1) .....	Yes.	
63.6(b)(2) .....	Yes.	
63.6(b)(3) .....	Yes.	
63.6(b)(4) .....	Yes.	
63.6(b)(5) .....	Yes.	
63.6(b)(6) .....	No .....	Reserved.
63.6(b)(7) .....	Yes.	
63.6(c)(1) .....	Yes .....	§ 63.1311 specifies the compliance date.
63.6(c)(2) .....	Yes.	
63.6(c)(3) .....	No .....	Reserved.
63.6(c)(4) .....	No .....	Reserved.
63.6(c)(5) .....	Yes.	
63.6(d) .....	No .....	Reserved.
63.6(e) .....	Yes .....	Except the plan, and any records or reports of start-up, shutdown and malfunction do not apply to Group 2 emission points, unless they are included in an emissions average.
63.6(f)(1) .....	Yes.	
63.6(f)(2) .....	Yes .....	Except § 63.7(c), as referred to in § 63.6(f)(2)(iii)(D), does not apply.
63.6(f)(3) .....	Yes.	
63.6(g) .....	Yes.	
63.6(h) .....	No .....	Subpart JJJ does not require opacity and visible emission standards.
63.6(i) .....	Yes .....	Except for § 63.6(i)(15), which is reserved.
63.6(j) .....	Yes.	
63.7(a)(1) .....	Yes.	
63.7(a)(2) .....	No .....	§ 63.1335(e)(5) specifies submittal dates.
63.7(a)(3) .....	Yes.	
63.7(b) .....	No .....	§ 63.1333(a)(4) specifies notification requirements.
63.7(c) .....	No.	
63.7(d) .....	Yes.	
63.7(e) .....	Yes .....	Except that performance tests must be conducted at maximum representative operating conditions. In addition, some of the testing requirements specified in subpart JJJ are not consistent with § 63.7(e)(3).
63.7(f) .....	Yes.	
63.7(g) .....	Yes .....	Except that references to the Notification of Compliance Status report in § 63.9(h) are replaced with the requirements in § 63.1335(e)(5).
63.7(h) .....	Yes .....	Except § 63.7(h)(4)(ii) is not applicable, since the site-specific test plans in § 63.7(c)(3) are not required.
63.8(a)(1) .....	Yes.	
63.8(a)(2) .....	No.	
63.8(a)(3) .....	No .....	Reserved.
63.8(a)(4) .....	Yes.	
63.8(b)(1) .....	Yes.	
63.8(b)(2) .....	No .....	Subpart JJJ specifies locations to conduct monitoring.



TABLE 1.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART JJJ AFFECTED SOURCES—  
Continued

Reference	Applies to subpart JJJ	Comment
63.8(b)(3).		
63.8(c)(1)(i) .....	Yes.	
63.8(c)(1)(ii) .....	No.	
63.8(c)(1)(iii) .....	Yes.	
63.8(c)(2) .....	Yes.	
63.8(c)(3) .....	Yes.	
63.8(c)(4) .....	No .....	§ 63.1334 specifies monitoring frequency.
63.8(c)(5)—63.8(c)(8) .....	No.	
63.8(d) .....	No.	
63.8(e) .....	No.	
63.8(f)(1)—63.8(f)(3) .....	Yes.	
63.8(f)(4)(i) .....	No .....	Timeframe for submitting request is specified in § 63.1335(e).
63.8(f)(4)(ii) .....	No.	
63.8(f)(4)(iii) .....	No.	
63.8(f)(5)(i) .....	Yes.	
63.8(f)(5)(ii) .....	No.	
63.8(f)(5)(iii) .....	Yes.	
63.8(f)(6) .....	No .....	Subpart JJJ does not require continuous emission monitors.
63.8(g) .....	No .....	Data reduction procedures specified in § 63.1335(d).
63.9(a) .....	Yes.	
63.9(b) .....	No .....	Subpart JJJ does not require an initial notification.
63.9(c) .....	Yes.	
63.9(d) .....	Yes.	
63.9(e) .....	No.	
63.9(f) .....	No .....	Subpart JJJ does not require opacity and visible emission standards.
63.9(g) .....	No.	
63.9(h) .....	No .....	§ 63.1335(e)(5) specifies Notification of Compliance Status requirements.
63.9(i) .....	Yes.	
63.9(j) .....	No.	
63.10(a) .....	Yes.	
63.10(b)(1) .....	Yes.	
63.10(b)(2) .....	Yes.	
63.10(b)(3) .....	No .....	§ 63.1310(b) requires documentation of sources that are not affected sources.
63.10(c) .....	No .....	§ 63.1335 specifies recordkeeping requirements.
63.10(d)(1) .....	Yes.	
63.10(d)(2) .....	No.	
63.10(d)(3) .....	No .....	Subpart JJJ does not require opacity and visible emission standards.
63.10(d)(4) .....	Yes.	
63.10(d)(5) .....	Yes .....	Except that reports required by § 63.10(d)(5)(i) may be submitted at the same time as Periodic Reports specified in § 63.1335(e)(6). The start-up, shutdown, and malfunction plan, and any records or reports of start-up, shutdown, and malfunction do not apply to Group 2 emission points unless they are included in an emissions average.
63.10(e) .....	No.	
63.10(f) .....	Yes.	
63.10(d)(4) .....	Yes.	
63.12 .....	Yes.	
63.13 .....	Yes.	
63.14 .....	Yes.	
63.15 .....	Yes.	

TABLE 2.—GROUP 1 STORAGE VESSELS AT EXISTING AFFECTED SOURCES

Vessel capacity (cubic meters)	Vapor pressure <sup>a</sup> (kilopascals)
75 ≤ capacity < 151 .....	≥13.1

TABLE 2.—GROUP 1 STORAGE VESSELS AT EXISTING AFFECTED SOURCES—Continued

Vessel capacity (cubic meters)	Vapor pressure <sup>a</sup> (kilopascals)
151 ≥ capacity .....	≥5.2

<sup>a</sup>Maximum true vapor pressure of total organic HAP at storage temperature.

TABLE 3.—GROUP 1 STORAGE VESSELS AT EXISTING AFFECTED SOURCES PRODUCING THE LISTED THERMOPLASTICS

Thermoplastic	Chemical <sup>a</sup>	Vessel capacity (cubic meters)	Vapor pressure <sup>b</sup> (kilopascals)
ASA/AMSAN <sup>c</sup> .....	Styrene/acrylonitrile mixture .....	≥3.78 .....	≥0.47
	Acrylonitrile .....	≥75.7 .....	≥1.62
Polystyrene, continuous processes .....		≥38 and <75.7 .....	≥14.2
		≥75.7 .....	≥1.9
Nitrile <sup>c</sup> .....	Acrylonitrile .....	≥ 13.25 .....	≥ 1.8

<sup>a</sup>Vessel capacity and vapor pressure criteria are specific to the listed chemical. When chemical not listed (i.e., —), vessel capacity and vapor pressure criteria apply to all chemicals regulated by this rule for a given subcategory.<sup>b</sup>Maximum true vapor pressure of total organic HAP at storage temperature.<sup>c</sup>The applicability criteria in Table 2 of this subpart shall be used for chemicals not specifically listed in this table (i.e., Table 3).

TABLE 4.—GROUP 1 STORAGE VESSELS AT NEW AFFECTED SOURCES

Vessel capacity (cubic meters)	Vapor pressure <sup>a</sup> (kilopascals)
38 ≤ capacity < 151 .....	≥13.1
151 ≤ capacity .....	≥0.7

<sup>a</sup>Maximum true vapor pressure of total organic HAP at storage temperature.

TABLE 5.—GROUP 1 STORAGE VESSELS AT NEW AFFECTED SOURCES PRODUCING THE LISTED THERMOPLASTICS

Thermoplastic	Chemical <sup>a</sup>	Vessel capacity (cubic meters)	Vapor pressure <sup>b</sup> (kilopascals)
ASA/AMSAN <sup>c</sup> .....	Styrene/acrylonitrile mixture .....	≥3.78 .....	≥0.47.
	Acrylonitrile .....	≥75.7 .....	≥1.62.
SAN, continuous .....		≥2,271 .....	0.5≤vp<0.7.
		≥151 .....	0.7≤vp≤10.
		≥30 and <151 .....	vp≥10.
		≥151 .....	vp≥10.
Nitrile <sup>c</sup> .....	Acrylonitrile .....	≥13.25 .....	≥1.8.
Polystyrene, continuous processes		≥19.6 and <45.4 .....	vp≥7.48.
		≥45.4 and <109.8 .....	vp≥0.61.
		≥109.8 .....	vp≥0.53.
ABS, continuous mass .....	Styrene .....	≥45.43 .....	≥0.078.
		≥38 and <45.43 .....	vp≥13.1.
		≥45.43 .....	vp≥0.53.

<sup>a</sup>Vessel capacity and vapor pressure criteria are specific to the listed chemical. When chemical not listed (i.e., —), vessel capacity and vapor pressure criteria apply to all chemicals regulated by this rule for a given subcategory.<sup>b</sup>Maximum true vapor pressure of total organic HAP at storage temperature.<sup>c</sup>The applicability criteria in Table 4 of this subpart shall be used for chemicals not specifically listed in this table (i.e., Table 5).

TABLE 6.—KNOWN ORGANIC HAZARDOUS AIR POLLUTANTS FROM THERMOPLASTIC PRODUCTS

Thermoplastic product/ subcategory	Organic HAP/chemical name (CAS No.)						
	Acetal- dehyde (75–07–0)	Acrylonitrile (107–13–1)	1,3 Buta- diene (106– 99–0)	1,4– Dioxane (123–91–1)	Ethylene Glycol (107–21–1)	Methanol (67–56–1)	Styrene (100–42–5)
ABS latex .....	.....	✓	✓	.....	.....	.....	✓
ABS using a batch emul- sion process .....	.....	✓	✓	.....	.....	.....	✓
ABS using a batch sus- pension process .....	.....	✓	✓	.....	.....	.....	✓
ABS using a continuous emulsion process .....	.....	✓	✓	.....	.....	.....	✓
ABS using a continuous mass process .....	.....	✓	✓	.....	.....	.....	✓
ASA/AMSAN .....	.....	✓	✓	.....	.....	.....	✓
EPS .....	.....	.....	.....	.....	.....	.....	✓
MABS .....	.....	✓	✓	.....	.....	.....	✓
MBS .....	.....	.....	✓	.....	.....	.....	✓
Nitrile resin .....	.....	✓	.....	.....	.....	.....	.....
PET using a batch di- methyl terephthalate process .....	✓	.....	.....	✓	✓	✓	.....
PET using a batch ter- ephthalic acid process .....	✓	.....	.....	✓	✓	.....	.....
PET using a continuous dimethyl terephthalate process .....	✓	.....	.....	✓	✓	✓	.....
PET using a continuous terephthalic acid proc- ess .....	✓	.....	.....	✓	✓	.....	.....
PET using a continuous terephthalic acid high viscosity multiple end finisher process .....	✓	.....	.....	✓	✓	.....	.....
Polystyrene resin using a batch process .....	.....	.....	.....	.....	.....	.....	✓
Polystyrene resin using a continuous process .....	.....	.....	.....	.....	.....	.....	✓
SAN using a batch proc- ess .....	.....	✓	.....	.....	.....	.....	✓
SAN using a continuous process .....	.....	✓	.....	.....	.....	.....	✓

AAACAS No.=Chemical Abstract Service Number.

AAAABS=Acrylonitrile butadiene styrene resin.

AAAASA/AMSAN=Acrylonitrile styrene resin/alpha methyl styrene acrylonitrile resin.

AAAEPS=expandable polystyrene resin.

AAAMABS=methyl methacrylate acrylonitrile butadiene styrene resin.

AAAPET=poly(ethylene terephthalate) resin.

AAAAAN=styrene acrylonitrile resin.

AAAMBS=methyl methacrylate butadiene styrene resin.

TABLE 7.—GROUP 1 BATCH PROCESS VENTS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Control device	Parameters to be monitored	Recordkeeping and reporting requirements for monitored parameters
Thermal Incinerator .....	Firebox tempera- ture <sup>a</sup> .	<ol style="list-style-type: none"> <li>1. Continuous records as specified in § 63.1326(e)(1).<sup>b</sup></li> <li>2. Record and report the average firebox temperature measured during the performance test—NCS.<sup>c</sup></li> <li>3. Record the batch cycle daily average firebox temperature as specified in § 63.1326(e)(2).</li> <li>4. Report all batch cycle daily average temperatures that are below the minimum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR.<sup>d,e</sup></li> </ol>

TABLE 7.—GROUP 1 BATCH PROCESS VENTS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS—Continued

Control device	Parameters to be monitored	Recordkeeping and reporting requirements for monitored parameters
Catalytic Incinerator .....	Temperature upstream and downstream of the catalyst bed.	<ol style="list-style-type: none"> <li>1. Continuous records as specified in § 63.1326(e)(1).<sup>b</sup></li> <li>2. Record and report the average upstream and downstream temperatures and the average temperature difference across the catalyst bed measured during the performance test—NCS.<sup>c</sup></li> <li>3. Record the batch cycle daily average upstream temperature and temperature difference across catalyst bed as specified in § 63.1326(e)(2).</li> <li>4. Report all batch cycle daily average upstream temperatures that are below the minimum upstream temperature established in the NCS or operating permit—PR.<sup>d,e</sup></li> <li>5. Report all batch cycle daily average temperature differences across the catalyst bed that are below the minimum difference established in the NCS or operating permit—PR.<sup>d,e</sup></li> <li>6. Report all instances when monitoring data are not collected.<sup>e</sup></li> </ol>
Boiler or Process Heater with a design heat input capacity less than 44 megawatts and where the batch process vents or aggregate batch vent streams are not introduced with or used as the primary fuel.	Firebox temperature <sup>a</sup> .	<ol style="list-style-type: none"> <li>1. Continuous records as specified in § 63.1326(e)(1).<sup>b</sup></li> <li>2. Record and report the average firebox temperature measured during the performance test—NCS.<sup>c</sup></li> <li>3. Record the batch cycle daily average firebox temperature as specified in § 63.1326(e)(2).<sup>d</sup></li> <li>4. Report all batch cycle daily average temperatures that are below the minimum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR.<sup>d,e</sup></li> </ol>
Flare .....	Presence of a flame at the pilot light.	<ol style="list-style-type: none"> <li>1. Hourly records of whether the monitor was continuously operating during batch emission episodes, or portions thereof, selected for control and whether the pilot flame was continuously present during said periods.</li> <li>2. Record and report the presence of a flame at the pilot light over the full period of the compliance determination—NCS.<sup>c</sup></li> <li>3. Record the times and durations of all periods during batch emission episodes, or portions thereof, selected for control when a pilot flame is absent or the monitor is not operating.</li> <li>4. Report the times and durations of all periods during batch emission episodes, or portions thereof, selected for control when all pilot flames of a flare are absent—PR.<sup>d</sup></li> </ol>
Scrubber for halogenated batch process vents or aggregate batch vent streams (Note: Controlled by a combustion device other than a flare).	pH of scrubber effluent, and.	<ol style="list-style-type: none"> <li>1. Continuous records as specified in § 63.1326(e)(1).<sup>b</sup></li> <li>2. Record and report the average pH of the scrubber effluent measured during the performance test—NCS.<sup>c</sup></li> <li>3. Record the batch cycle daily average pH of the scrubber effluent as specified in § 63.1326(e)(2).</li> <li>4. Report all batch cycle daily average pH values of the scrubber effluent that are below the minimum operating pH established in the NCS or operating permit and all instances when monitoring data are not collected—PR.<sup>d,e</sup></li> </ol>
Do .....	Scrubber liquid flow rate.	<ol style="list-style-type: none"> <li>1. Continuous records as specified in § 63.1326(e)(1).<sup>b</sup></li> <li>2. Record and report the scrubber liquid flow rate measured during the performance test—NCS.<sup>c</sup></li> <li>3. Record the batch cycle daily average scrubber liquid flow rate as specified in § 63.1326(e)(2).</li> <li>4. Report all batch cycle daily average scrubber liquid flow rates that are below the minimum flow rate established in the NCS or operating permit and all instances when monitoring data are not collected—PR.<sup>d,e</sup></li> </ol>
Absorber <sup>f</sup> .....	Exit temperature of the absorbing liquid, and.	<ol style="list-style-type: none"> <li>1. Continuous records as specified in § 63.1326(e)(1).<sup>b</sup></li> <li>2. Record and report the average exit temperature of the absorbing liquid measured during the performance test—NCS.<sup>c</sup></li> <li>3. Record the batch cycle daily average exit temperature of the absorbing liquid as specified in § 63.1326(e)(2) for each batch cycle.</li> <li>4. Report all the batch cycle daily average exit temperatures of the absorbing liquid that are below the minimum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR.<sup>d,e</sup></li> </ol>
Do .....	Exit specific gravity for the absorbing liquid.	<ol style="list-style-type: none"> <li>1. Continuous records as specified in § 63.1326(e)(1).<sup>b</sup></li> <li>2. Record and report the average exit specific gravity measured during the performance test—NCS.<sup>c</sup></li> <li>3. Record the batch cycle daily average exit specific gravity as specified in § 63.1326(e)(2).</li> <li>4. Report all batch cycle daily average exit specific gravity values that are below the minimum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR.<sup>d,e</sup></li> </ol>

TABLE 7.—GROUP 1 BATCH PROCESS VENTS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS—Continued

Control device	Parameters to be monitored	Recordkeeping and reporting requirements for monitored parameters
Condenser <sup>f</sup> .....	Exit (product side) temperature.	1. Continuous records as specified in § 63.1326(e)(1). <sup>b</sup> 2. Record and report the average exit temperature measured during the performance test—NCS. <sup>c</sup> 3. Record the batch cycle daily average exit temperature as specified in § 63.1326(e)(2). 4. Report all batch cycle daily average exit temperatures that are above the maximum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR. <sup>d,e</sup>
Carbon Adsorber <sup>f</sup> .....	Total regeneration stream mass flow during carbon bed regeneration cycle(s), and.	1. Record the total regeneration stream mass flow for each carbon bed regeneration cycle. 2. Record and report the total regeneration stream mass flow during each carbon bed regeneration cycle measured during the performance test—NCS. <sup>c</sup> 3. Report all carbon bed regeneration cycles when the total regeneration stream mass flow is above the maximum mass flow rate established in the NCS or operating permit—PR. <sup>d,e</sup>
Do .....	Temperature of the carbon bed after regeneration and within 15 minutes of completing any cooling cycle(s).	1. Record the temperature of the carbon bed after each regeneration and within 15 minutes of completing any cooling cycle(s). 2. Record and report the temperature of the carbon bed after each regeneration and within 15 minutes of completing any cooling cycle(s) measured during the performance test—NCS. <sup>c</sup> 3. Report all carbon bed regeneration cycles when the temperature of the carbon bed after regeneration, or within 15 minutes of completing any cooling cycle(s), is above the maximum temperature established in the NCS or operating permit—PR. <sup>d,e</sup>
All Control Devices .....	Presence of flow diverted to the atmosphere from the control device or.	1. Hourly records of whether the flow indicator was operating during batch emission episodes, or portions thereof, selected for control and whether flow was detected at any time during said periods as specified in § 63.1326(e)(3). 2. Record and report the times and durations of all periods during batch emission episodes, or portions thereof, selected for control when emissions are diverted through a bypass line or the flow indicator is not operating—PR. <sup>d</sup>
Do .....	Monthly inspections of sealed valves.	1. Records that monthly inspections were performed as specified in § 63.1326(e)(4)(i). 2. Record and report all monthly inspections that show the valves are not closed or the seal has been changed—PR. <sup>d</sup>
Absorber, Condenser, and Carbon Adsorber (as an alternative to the requirements previously presented in this table).	Concentration level or reading indicated by an organic monitoring device at the outlet of the control device.	1. Continuous records as specified in § 63.1326(e)(1). <sup>b</sup> 2. Record and report the average concentration level or reading measured during the performance test—NCS. <sup>c</sup> 3. Record the batch cycle daily average concentration level or reading as specified in § 63.1326(e)(2). 4. Report all batch cycle daily average concentration levels or readings that are above the maximum concentration or reading established in the NCS or operating permit and all instances when monitoring data are not collected—PR. <sup>d,e</sup>

<sup>a</sup> Monitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.

<sup>b</sup> "Continuous records" is defined in § 63.111.

<sup>c</sup> NCS = Notification of Compliance Status described in § 63.1335(e)(5).

<sup>d</sup> PR = Periodic Reports described in § 63.1335(e)(6).

<sup>e</sup> The periodic reports shall include the duration of periods when monitoring data are not collected as specified in § 63.1335(e)(6)(iii)(C).

<sup>f</sup> Alternatively, these devices may comply with the organic monitoring device provisions listed at the end of this table.

TABLE 8.—OPERATING PARAMETERS FOR WHICH LEVELS ARE REQUIRED TO BE ESTABLISHED FOR CONTINUOUS AND BATCH PROCESS VENTS AND AGGREGATE BATCH VENT STREAMS

Device	Parameters to be monitored	Established operating parameter(s)
Thermal incinerator .....	Firebox temperature .....	Minimum temperature.
Catalytic incinerator .....	Temperature upstream and downstream of the catalyst bed.	Minimum upstream temperature; and minimum temperature difference across the catalyst bed.
Boiler or process heater .....	Firebox temperature .....	Minimum temperature.
Scrubber for halogenated vents .....	pH of scrubber effluent; and scrubber liquid flow rate.	Minimum pH; and minimum flow rate.

TABLE 8.—OPERATING PARAMETERS FOR WHICH LEVELS ARE REQUIRED TO BE ESTABLISHED FOR CONTINUOUS AND BATCH PROCESS VENTS AND AGGREGATE BATCH VENT STREAMS—Continued

Device	Parameters to be monitored	Established operating parameter(s)
Absorber .....	Exit temperature of the absorbing liquid; and exit specific gravity of the absorbing liquid.	Minimum temperature; and minimum specific gravity.
Condenser .....	Exit temperature .....	Maximum temperature.
Carbon absorber .....	Total regeneration stream mass flow during carbon bed regeneration cycle; and temperature of the carbon bed after regeneration (and within 15 minutes of completing any cooling cycle(s)).	Maximum mass flow; and maximum temperature.
Other devices (or as an alternate to the requirements previously presented in this table).	HAP concentration level or reading at outlet of device.	Maximum HAP concentration or reading.

<sup>a</sup>Concentration is measured instead of an operating parameter.

## APPENDIX A TO PART 63—TEST METHODS

## METHOD 301—FIELD VALIDATION OF POLLUTANT MEASUREMENT METHODS FROM VARIOUS WASTE MEDIA

## 1. Applicability and principle

1.1 *Applicability.* This method, as specified in the applicable subpart, is to be used whenever a source owner or operator (hereafter referred to as an “analyst”) proposes a test method to meet a U.S. Environmental Protection Agency (EPA) requirement in the absence of a validated method. This Method includes procedures for determining and documenting the quality, i.e., systematic error (bias) and random error (precision), of the measured concentrations from an effected source. This method is applicable to various waste media (i.e., exhaust gas, wastewater, sludge, etc.).

1.1.1 If EPA currently recognizes an appropriate test method or considers the analyst's test method to be satisfactory for a particular source, the Administrator may waive the use of this protocol or may specify a less rigorous validation procedure. A list of validated methods may be obtained by contacting the Emission Measurement Technical Information Center (EMTIC), Mail Drop 19, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, (919) 541-0200. Procedures for obtaining a waiver are in Section 12.0.

1.1.2 This method includes optional procedures that may be used to expand the applicability of the proposed method. Section 7.0 involves ruggedness testing (Laboratory Evaluation), which demonstrates the sensitivity of the method to various parameters. Section 8.0 involves a procedure for including sample stability in bias and precision for assessing sample recovery and analysis times; Section 9.0 involves a procedure for the determination of the practical limit of quantitation for determining the lower limit of the method. These optional procedures are

required for the waiver consideration outlined in Section 12.0.

1.2 *Principle.* The purpose of these procedures is to determine bias and precision of a test method at the level of the applicable standard. The procedures involve (a) introducing known concentrations of an analyte or comparing the test method against a validated test method to determine the method's bias and (b) collecting multiple or collocated simultaneous samples to determine the method's precision.

1.2.1 *Bias.* Bias is established by comparing the method's results against a reference value and may be eliminated by employing a correction factor established from the data obtained during the validation test. An offset bias may be handled accordingly. Methods that have bias correction factors outside 0.7 to 1.3 are unacceptable. Validated method to proposed method comparisons, section 6.2, requires a more restrictive test of central tendency and a lower correction factor allowance of 0.90 to 1.10.

1.2.2 *Precision.* At the minimum, paired sampling systems shall be used to establish precision. The precision of the method at the level of the standard shall not be greater than 50 percent relative standard deviation. For a validated method to proposed method equivalency comparisons, section 6.2, the analyst must demonstrate that the precision of the proposed test method is as precise as the validated method for acceptance.

## 2. Definitions

2.1 *Negative bias.* Bias resulting when the measured result is less than the “true” value.

2.2 *Paired sampling system.* A sampling system capable of obtaining two replicate samples that were collected as closely as possible in sampling time and sampling location.

2.3 *Positive bias.* Bias resulting when the measured result is greater than the “true” value.